LINDA LINGLE



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STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

P.O. BOX 621 HONOLULU, HAWAII 96809

STAFF SUBMITTAL

for the meeting of the COMMISSION ON WATER RESOURCE MANAGEMENT

September 24, 2009 Honolulu, Oahu

Maui Economic Opportunity, Inc.
APPLICATION FOR A WATER USE PERMIT
APPLICATIONS FOR WELL CONSTRUCTION AND PUMP INSTALLATION PERMITS
MEO BEST Ke Kahua Farm Well (Well No. 5429-03), TMK (2) 3-3-001:016, WUP No. 877
New Agricultural Use for 0.023 mgd
Iao Ground Water Management Area, Caprock Aquifer, Maui

APPLICANT:

LANDOWNER:

Maui Economic Opportunity, Inc.

Same

P.O. Box 2122 Kahului, HI 96733

SUMMARY OF REQUEST:

The applicant requests that the Commission on Water Resource Management (Commission) approve a water use permit for an allocation of **0.023** million gallons per day (mgd) of **non-potable caprock** ground water from a **new** well to supply **7.38** acres of crop irrigation from a proposed MEO BEST Ke Kahua Farm Well.

LOCATION MAP: See Exhibit 1

BACKGROUND:

July 17, 2009

Water use permit and well construction/pump installation permit applications were filed with the Commission, and were accepted as complete and circulated for review as of that date. The deadline for

comments was August 31, 2009.

August 10 & 17, 2009 The v

The water use permit application was noticed in the Maui News.

August 31, 2009 At the deadline for co

At the deadline for comment, there was no objection; therefore, the deadline for Commission action, at 90 days, is November 17, 2009. While there was no objection to the project, one party has raised an objection to the process by which it is alleged that different farmers are treated inconsistently.

which it is alleged that different farmers are treated inconsistently.

August 31, 2009

The Commission received a timely letter, dated August 26, 2009, from Alan Arakawa on behalf of Bryan Sarasin, registering an objection to approval of this application (see Exhibit 2). While it states a "formal objection", it also states, as did both Bryan Sarasin and Alan Arakawa by telephone, that it's not an objection to the MEO project so much as an objection to the approval of applications for new uses before the approval of existing uses.

ANALYSIS/ISSUES:

Section 174C-49(a) of the State Water Code establishes seven (7) criteria that must be met to obtain a water use permit. An analysis of the proposed permit in relation to these criteria follows:

(1) Water availability

Through the Hawaii Water Plan, the Commission has adopted 20 mgd as the sustainable yield for the Iao Basal Aquifer System. However, the sustainable yield concept specifically addresses the properties of the basal aquifer, whereas the caprock is a distinct geological formation that impedes basal discharge to the ocean, actually thickening the lens and enlarging its sustainable yield. The basal aquifer discharges through the caprock, which is also under the direct influence of sea water and is therefore of a more brackish water quality. Consequently, withdrawals from the caprock do not count against the basal sustainable yield — water withdrawn from the caprock does not affect withdrawals from the basal aquifer. There is no estimated sustainable yield established for the brackish caprock aquifer. (See aquifer section diagram, upper diagram of Exhibit 3).

Examples of these withdrawals are the County's wells irrigation the Department of Parks and Recreation properties in Wailuku and Kahului. These have gone through the water use permitting process for existing use and have been approved for a total of 0.274 mgd, which do not count against the Iao sustainable yield. These are the total existing caprock uses from Iao at this time.

The proposed well would withdraw 0.023 mgd from the caprock aquifer. Because there is no estimate sustainable yield, the limit to availability will be determined by other factors such as the pump tests and any noted interference with existing legal uses. The prima facie geologic evidence indicates that this request can be accommodated by available resources.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" is

"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest".

I. Purpose of Use

The applicant is requesting the use of brackish, non-potable ground water to irrigate 7.38 acres of taro, vegetable crops, ti plants, and drought-tolerant native plants. The Declaration of Policy section, §174C-2(c) HRS, states that the Water Code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for various purposes including irrigation uses.

II. Quantity Justification

The applicant is requesting a total of **0.023** mgd for a variety of plantings to serve a related project food kitchen for a Headstart pre-school, together with native plantings. The different crops require a combination of irrigation methods, including flood irrigation for taro fields, sprinkler and drip irrigation for vegetable crops, and trickle or drip irrigation for the native plants. The amounts proposed are about 3,000 gallons per acre per day (gad), meant as a maximum when normal rainfall is low, as it has been for several years recently. The IWREDDS Irrigation Model, which accounts for climatic values, by parcel, calculates that the amounts are more on the order of 4,000 to 5,000 gad, for a total for this project or about 0.035 mgd. The applicant is estimating conservatively, also anticipating some recycling of water use.

III. Efficiency of Use

The application notes different kinds of irrigation methods for different types of crops, to reflect efficient practices suited to the needs of the respective crops.

IV. Analysis of Practical Alternatives

The application form lists 6 alternative sources for the proposed new uses of ground water. A review of each of the applicant's responses is as follows:

- 1. Municipal sources these potable supplies are not available for agricultural uses.
- 2. Wastewater reuse there is no supply available at this location.
- 3. Ditch system not available. Staff note: Na Wai Eha ditch sources are going through a contested case hearing, with deliberations still due. The nearest ditch would be the Spreckels Ditch, shown on Exhibit 4.
- 4. Desalinization unfeasible. *Staff note*: the expense of this option may only be feasible for uses that can pay a premium rate.

- 5. Surface water stream flow is very intermittent and unreliable as a source of agricultural irrigation water. *Staff note*: the nearest stream is the south fork of the South Waiehu Stream, which is an intermittent stream, and did not figure into the instream flow standards adjudicated in the Na Wai Eha proceedings.
- Conservations measures measures include water reuse or recycling (hydroponic system), monitoring of the water distribution system, and use of drought tolerant native plants.

The 2000 Legislature amended the Water Code to include a new section, §174C-51.5 HRS that provides the Commission with the authority to require dual line (potable and non-potable) water supply systems in new industrial and commercial developments located in designated water management areas. In this case, the applicant does not have potable water service and is proposing to install only a single non-potable system. Therefore, this provision does not need to be invoked.

As a side note, HRS §174C-51.5(3)(b) requires the county boards of water supply, in consultation with the department of health, to adopt standards for non-potable water distributed through dual line water supply systems and rules regarding the use of non-potable water. The standards and rules shall be adopted in accordance with Chapter 91 and shall protect existing water quality and the health and safety of the public. Staff will follow up with the county boards of water supply as to the status of their dual-line standards and rules adoption, so that the Commission may invoke this provision under appropriate future circumstances.

(3) Interference with other existing legal uses

There are 6 other caprock wells currently in use within 1 mile of this source, all of which are closer to the shoreline than to this well. Conversely, use of this well would not be expected to impact these other wells, as drawdown effects should be limited to the shoreline, approximately 2,000 feet away.

The water use registration database lists two wetland springs used for taro and other crop production at Paukukalo, approximately 4,000 feet from this project and perhaps 800 feet from the shoreline and from Iao Stream to the south (see Exhibit 4). While the source for these springs is not known, the relative configuration of the springs and the proposed well make it unlikely that well withdrawals would adversely impact the springs. The proposed well is closer to the ocean and to an intermittent tributary of South Waiehu Stream, which would likely be impacted before the registered springs.

(4) Public interest

Public interest is defined under §174C-2 - Declaration of policy, as follows:

"(c) The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest."

There have been no public comments or objections to this application (other than state & county general plans and land use designation comments noted in criteria (5)). The application was accompanied by a letter from the Paukukalo Hawaiian Homestead Association has endorsed the project and offered no additional considerations.

Therefore, staff believes this application meets the public interest.

(5) State & county general plans and land use designations

The proposed uses are in the State Agricultural District, and the county zoning is Agriculture and Interim. Therefore, the proposed use is consistent with these land use designations.

Normal agency review includes:

- 1) the State's Department of Land and Natural Resources (DLNR) and its State Parks, Aquatic Resources, Historic Preservation, and Land Divisions; the Department of Health (DOH) with its Clean Water, Safe Drinking Water, and Wastewater Branches; the Department of Hawaiian Home Lands (DDHL), and Land Use Commission (LUC); and the Office of Hawaiian Affairs (OHA).
- 2) the County's County Council, Department of Planning and Permitting, and the Department of Water Supply;

Responses from these agencies have all noted "No comments or objections" through this review. These proposed uses are consistent with the state and county general plans and land use designations.

Therefore, this application meets the state & county general plans and land use designations.

(6) County land use plans and policies

Again normal County review includes County Council, Department of Planning and Permitting, and the Department of Water Supply. All responses have indicated "No comments or objections". A Special Management Area Permit is not required.

Therefore, this application meets the county land use plans and policies.

(7) <u>Interference with Hawaiian home lands rights</u>

All permits are subject to the prior rights of Hawaiian home lands. The Department of Hawaiian Home Lands (DHHL) and the Office of Hawaiian Affairs have reviewed this application and raised no additional comments or objections. Further, standard water use permit conditions 3.g., 6., and 9.f. notify all water use permittees that their permits are subject to and cannot interfere with Hawaiian home land rights.

Therefore, this application will not interfere with Hawaiian home lands rights.

Other issues

None pertinent to the application were raised.

Ground water permittee Bryan Sarasin (Well No. 5631-08, WUP 853) and his consultant Alan M. Arakawa have raised concern about approving this application in advance of outstanding applications for water use permits from basal sources and from stream diversions, feeling that it disadvantages farmers whose needs have been unresolved. They note that while the Commission is trying to balance basal aquifer use with surface water use, farmers who are severely impacted by lack of access to water have suffered delay in receiving approval, while this application seems to be "going to the head of the line". Staff notes that the designation process has proceeded separately for ground water and surface water, and that the limited availability of each has delayed prompt action due to contested case hearings. No such limitation has arisen for caprock water.

Maui Department of Water Supply (MDWS) raised a similar concern, stating that "if withdrawals from the proposed well would in any way detrimental (sic) to DWS existing use, ...then we would object to WUPA No.877". They go on to clarify that "new" uses should not interfere with "existing" uses, and that MDWS applications for ground water use were partly approved and partly deferred pending a Decision and Order in CCH-MA06-01 (establishment of instream flow standards and approval of applications for existing use of high-level Iao Aquifer System Area sources). Staff notes that caprock withdrawals will not affect mauka stream flows nor existing basal ground water withdrawals, and that Na Wai Eha Surface Water Management Area stream diversion use applications also precede resolution of uses of potable basal aquifer ground water for non-potable or non public trust uses

RECOMMENDATION:

Staff recommends that the Commission:

- A. Approve the issuance of water use permit no. 877 to Maui Economic Opportunity, Inc. for the reasonable and beneficial use of 0.023 million gallons per day of non-potable water for agriculture from the MEO BEST Ke Kahua Farm Well (Well No. 5429-03), subject to the standard water use permit conditions listed in Attachment B and the following special conditions:
 - 1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.
 - 2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.
 - 3. Standard Condition 16 for a water shortage plan requirement is waived, as this is a caprock aquifer.
- B. Approve the well construction and pump installation permits for the MEO BEST Ke Kahua Well (Well No. 5429-03), subject to all the standard conditions and Special Conditions in A. above.

Respectfully submitted,

KEN C. KAWAHARA, P.E.

Deputy Directo

Attachment(s): A (Water Use Permit Detailed Information)

B (Water Use Permit Standard Conditions)

C (Well Construction Permit Standard Conditions)
D (Pump Installation Permit Standard Conditions)

Exhibit(s):

1 (Location Map)

2 (Letter from Alan M. Arakawa)

3 (Geologic Cross-Section of Wailuku)

4 (Topographic location of Well and Springs)

5 (Letter of Support from Paukukalo Hawaiian Homestead Community Association)

APPROVED FOR SUBMITTAL:

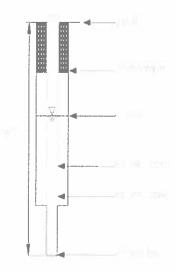
LAURA H. THIELEN

Chairperson

WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER:	Caprock Aquifer, Iao System, Wailuku Sector, Maui
Sustainable Yield:	NA
Existing Water Use Permits:	0.274 mgd
Available Allocation:	NA
Total other pending applications:	0 mgd
This application:	0.023 mgd
WELL:	MEO BEST Ke Kahua Farm Well (Well No. 5429-03)
Location:	Kahekili Highway, Wailuku, Maui, TMK: (2) 3-3-001:-16
Year Drilled:	NA
Casing Diameter:	8 in.
Elevations (msl = 0 ft.)	
Water Level:	7 ft.
Ground:	80 ft.
Bottom of Solid Casing:	70 ft.
Bottom of Perforated:	140ft.
Bottom of Open Hole:	NA ft.
Total Depth:	140 ft.
Grouted Annulus Depth:	60 ft.
Pump Capacity	60 gpm



Use Information

Quantity Requested: Future Type of Water Use:

Place of Water Use:

Reported Water Usage:

Nearby Similar Water Usage:

Caprock Aquifer, Iao Aquifer System
Current 12-Month Moving Average Withdrawal (See Exhibit 2):

0.023 gallons per day.

Agricultural

TMK: (2) 3-3-001:016

0 gpd 274,000 gpd

NA

Nearby Surrounding Wells and Other Registered Ground Water Use

There are 6 other wells within a mile of the well (see Exhibit 1). 6 of these wells are currently in use, 4 in production and 2 observation wells.

Staff Submittal September 24, 2009

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on August 10, 2009 and August 17, 2009 and a copy of the notice was sent to the Mayor's office. Copies of the completed application were sent to the Maui Departments of Water Supply and Planning; Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by August 31, 2009.

Objections

The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission by August 31, 2009.

To the best of staff's knowledge there are no objectors who have property interest within the Iao Aquifer System or who will be directly and immediately affected by the proposed water use.

Briefs in Support

Responses to objections, or briefs in support, regarding the application are required to be filed with the Commission ten (10) days after an objection is filed and, presumably, copies are served to the applicant. No briefs in support were filed with the Commission.

STANDARD WATER USE PERMIT CONDITIONS

- 1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)
- 2. The right to use ground water is a shared use right.
- 3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
 - a. Can be accommodated with the available water source;
 - b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
 - c. Will not interfere with any existing legal use of water;
 - d. Is consistent with the public interest;
 - e. Is consistent with State and County general plans and land use designations;
 - f. Is consistent with County land use plans and policies; and
 - g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).
- 4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.
- 5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
 - a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
 - b. The interim or permanent instream flow standard, as applicable, must be amended.
- 6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.
- 7. The water use permit application and submittal, as amended, approved by the Commission at its September 24, 2009 meeting are incorporated into this permit by reference.
- 8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.
- 9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
 - a. protect the water sources (quantity or quality);

- b. meet other legal obligations including other correlative rights;
- c. insure adequate conservation measures;
- d. require efficiency of water uses;
- e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
- f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
- g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

- 10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).
- 11. This permit shall be subject to the Commission's periodic review of the Iao Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Iao Aquifer System, or relevant modified aquifer(s), is reduced.
- 12. A permit may be transferred, in whole or in part, from the permittee to another, if:
 - a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
 - b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

- 13. The use(s) authorized by law and by this permit do not constitute ownership rights.
- 14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.
- 15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Iao Ground-Water Management Area.

- 17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.
- 18. Special conditions in the attached cover transmittal letter are incorporated herein by reference.
- 19. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

WELL CONSTRUCTION PERMIT

MEO BEST Ke Kahua Farm Well, Well No. 5429-03

Note: This permit shall be prominently displayed at the construction site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Aloha Well (Well No. 1234-56) at TMK 5-5-5: 55, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

- The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
- This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
- 3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/resources_permits.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.
- 4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.
- 5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.
- 6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.
- 7. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.
- 8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).
- 9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.
- 10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
- 11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
- Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.
- 13. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
- 14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.
- The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
- This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.
- Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: September 24, 2009

Expiration Date: September 24, 2011

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance

with any permit condition may be grounds for revocation and fines of up to \$5,000 per day starting from the permit date of approval.

Driller's Signature:	C-57 License #: (undetermined)	Date:
Printed Name: John Doe	Firm or Title:	Aloha Water Company

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.

PUMP INSTALLATION PERMIT MEO BEST Ke Kahua Farm Well, Well No. 5429-03

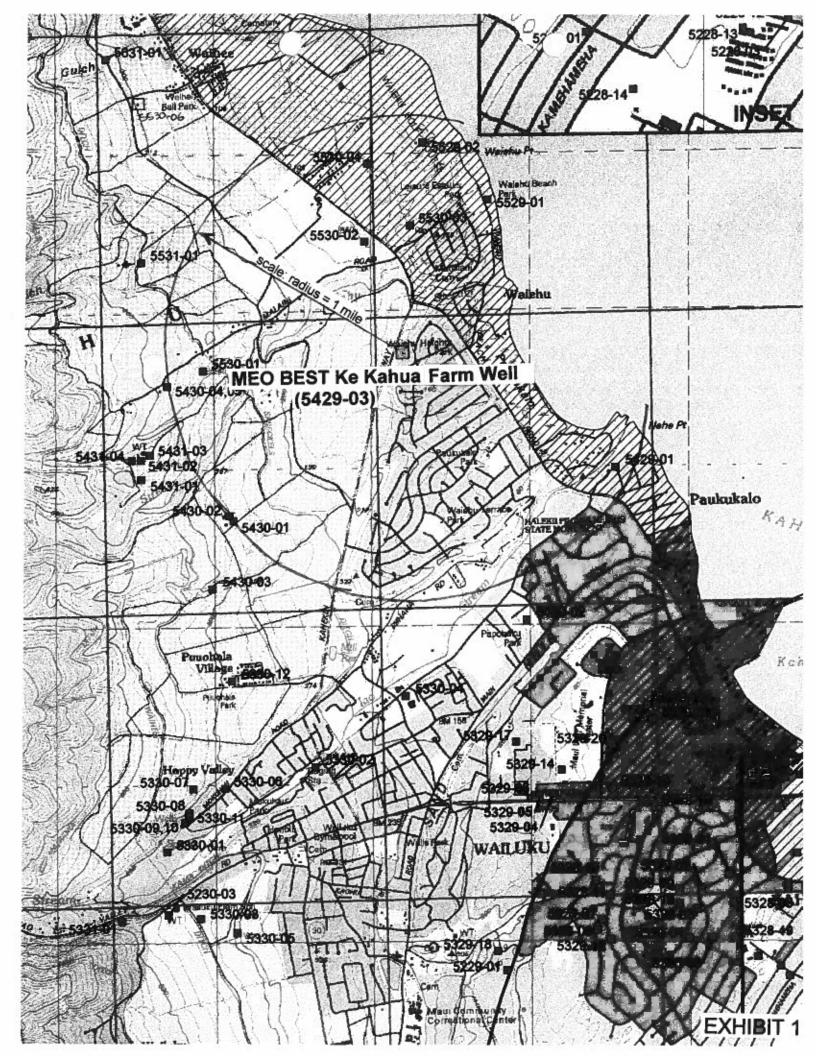
Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Aloha Well (Well No. 1234-56) at TMK 5-5-5: 55, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

- 1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
- No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.
- 3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
- 4. The pump installation permit shall be for installation of a 60 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.
- 5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels
- 6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.
- 7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).
- 8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.
- 9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
- 10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
- 11. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.
- 12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
- 13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
- Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval:	September 24, 2009	LAURA H. THIELEN, Chairperson
Expiration Date:	September 24, 2011	Commission on Water Resource Management
I have read the condit	ions and terms of this permit	and understand them. I accept and agree to meet these conditions as
pump installer have stransferred to any other	gned, dated, and returned the	proceed and understand that I shall not commence work until I and the permit to the Commission. I understand that this permit is not to be non-compliance with any permit condition may be grounds for revocation it date of approval.
pump installer have stransferred to any other	igned, dated, and returned the er entity. I also understand that	permit to the Commission. I understand that this permit is not to be non-compliance with any permit condition may be grounds for revocation

Attachments



RECEIVED COMMISSION ON WATER RESOURCE MANAGEMENT

Alan M. Arakawa Arakawa Consulting, LLC 407 Kamehameha Avenue Kahului, HI 96732

2009 AUG 31 AM 10: 12

Mr. Ken C. Kawahara, P.E., Deputy Director State of Hawaii Department of Land and Natural Resources State Commission on Water Resource Management P.O. Box 621 Honolulu, Hawaii 96809

August 26, 2009

RE: Water Use Permit Application for Waihee-Sarasin Well (Well No. 5631-08), WUPA 853, TMK-3-2-007:016

Water Use Permit Application for Waihee-Varel Well (Well No. 5631-07), WUPA 825, TMK 3-2-001:001

Dear Mr. Kawahara,

We would like to register a formal objection to the request for 0.023 million gallons per day from Maui Economic Opportunity (MUPA NO. 877) for Ke Kahua Farm (Well No. 5429-03), which is a new use. This request is to irrigate 6.8 acres.

Please note that our objection is not because we do not approve or like this MEO project. To the contrary, I helped and encouraged the Stanford Carr projects that this was carved from. Our objection has to do with consistency in the allocation requirements.

When my clients Bryan Sarasin and John Varel applied for well water, the County of Maui objected; they claimed that they needed all of the remaining aquifer water.

We contend that water should be issued to existing users before new users, according to your rules. We feel that it is grossly unfair that existing farms should be suffering severe losses due to the removal of water resources while new users are considered.

I am requesting a set of the formal rules governing the State of Hawaii designated aquifer water allocation requirements and procedures. I am also requesting a list of all registered applicants pending before the State Water Commission. I am also requesting a list that will clearly show how each applicant fits into the State Water Commission prioritized system and if any remaining water is available to be allocated. Please mail this information to me at the address above.

Thank you very much for the above information. If there is any charge for this information please inform me. If you need to contact me for any reason, my phone numbers are (808) 871-4301 for my residence and (808) 281-0354 for my Cellular phone.

Sincerely,

Alan Arakawa

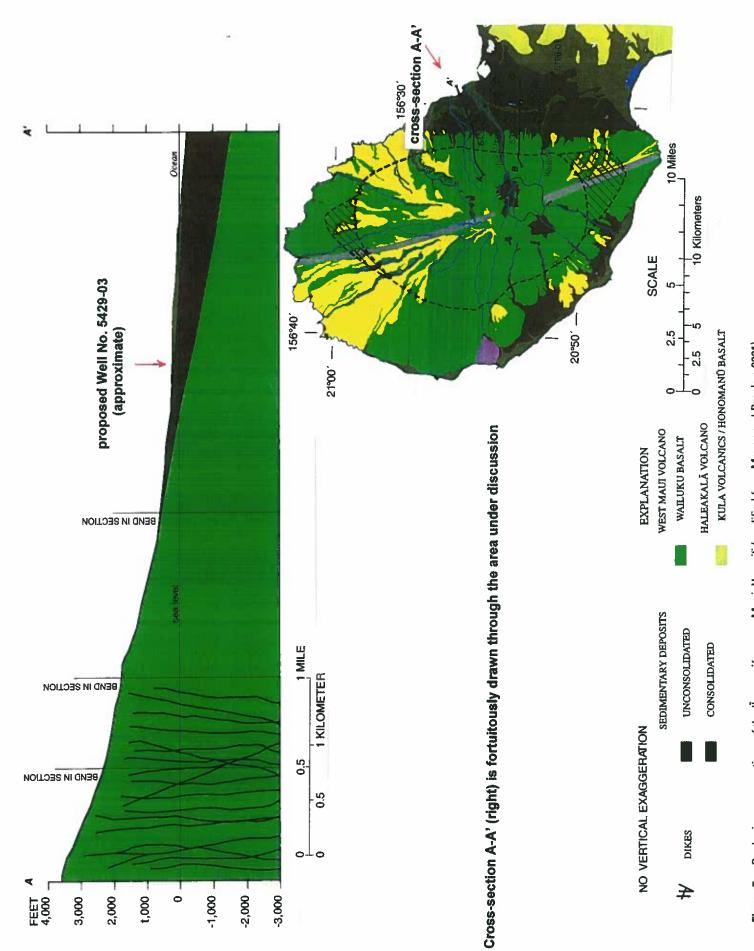
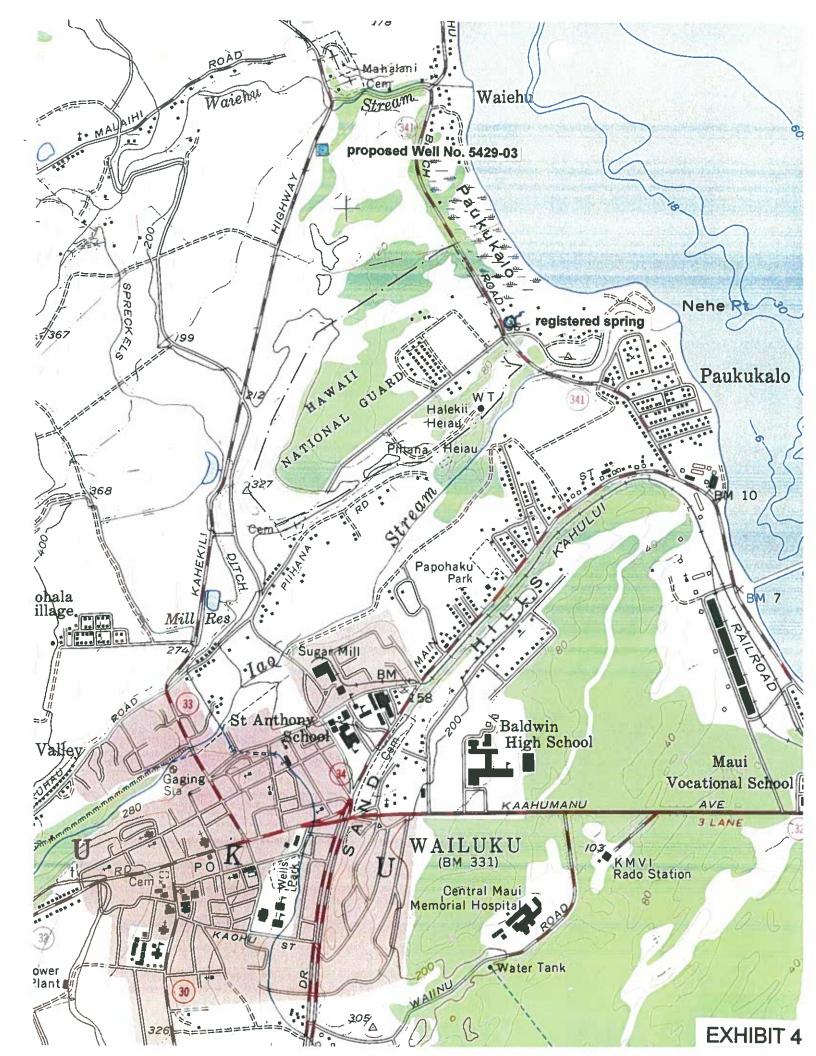


Figure 5. Geologic cross sections of the 'Iao aquifer area, Maui, Hawai'i (modified from Meyer and Presley, 2001). from USGS Scientific Investigations Report 2008-5236



Paukukalao Hawaiian Homestead Community Association Wailuku, Hawai'i 96793

Mr. Ken. E.K. Hunt
Program Director
BEST Reintegration Program
Maui Economic Opportunity, Inc.
99 Mahalani Street
Wailuku, Hawai'i 96793

Aloha Mr. Hunt:

RE: Letter of Support for the BEST Program Ke Kahua Agricultural Project

The Paukukalo Hawaiian Homestead Community Association (PHHCA) Board is made up of elected individuals from the community whose primary purpose is to ensure safety for all community members. As the voice for its community members, the PHHCA Board fully supports the BEST Program Ke Kahua Agricultural Project in Wai'ehu, Maui. We believe this project will benefit nearby residents living on Hawaiian Homestead Lands and other surrounding subdivisions.

We understand the Ke Kahua project will be a gathering place for community members, including incarcerated and formerly incarcerated individuals, to grow mentally, physically and spiritually through cooperative learning and work. As a community made up of native Hawaiians, we know the importance of instilling traditional Hawaiian values to younger generations and believe the Ke Kahua project will reinforce these values and encourage our community members to teach these values within their homes.

The PHHCA Board continuously looks within the Maui community for resources native Hawaiians may benefit from. We encourage all community members to participate in positive activities and to take advantage of educational and cultural opportunities that improve the overall well-being.

Mahalo for inviting the Paukukalo Hawaiian Homestead community to be a part of this great project. We look forward to building a relationship and taking part in all that Ke Kahua has to offer.

Sincerely,

Olinda Aiwohi

President PHHCA